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TACHINID FLIES WITH AN EVANESCENT FOURTH VEIN,
INCLUDING A NEW GENUS AND FIVE NEW SPECIES.

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INTRODUCTION.¹

The dipterous family Tachinidae contains several genera that have the fourth longitudinal vein evanescent at its tip. Those genera having this unusual character are widely scattered throughout this large family of parasitic flies. The object of this paper is to bring these genera together for convenience in making determinations. While this character is not a natural one it may be used very nicely for grouping these sixteen genera comprising twenty species. *Melanomelia aterrima* Strobl and *Besseria melanura* Meigen, both European species, are not included in my table because I was unable to secure a specimen of either species. All of the species treated in this paper, including the new ones, are in the U. S. National Museum collection.

The head, palpus, and right wing of each species included in this paper are shown for the convenience of persons interested in this group of flies. The palpus is figured principally to show its difference in form and size as among the different species.

Here, I wish to acknowledge my thanks to Dr. J. M. Aldrich for his friendly assistance.

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Racodineura antiqua Meigen (page 31).
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Schizotachina vitinervis Thompson (page 33).
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 Veins one, three, and five bristly.....15
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Euryceromyia robertsoni Townsend (page 34).
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Actia encosmae Bezzi (page 34).
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Actia lamia Meigen (page 34).
 Bristles on third vein extending to hind crossvein; a few long hairs on facial ridge above vibrissa.....16
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Actiopsis autumnalis Townsend (page 34).
 Much larger reddish yellow species with the parafacial much wider; back of head bulging more than in above species. (South Dakota.)
Actiopsis rufescens, new species (page 34).

Bezzimyia busckii Townsend.

Proc. U. S. Nat. Mus. 56, p. 591, 1919.

Figs. 1, 18.

One specimen labeled "Trinidad Rio, Panama, 7, 12, 12. A. Busck collector. *Type*, Cat. No. 22263 U. S. N. M."

Another specimen labeled "Los Borregos, Brownsville, Texas 7, 6, 07. H. S. Barber collector."

Melizoneura albipennis Robineau Desvoidy.

Myod. p. 102, 1830.

Figs. 2, 19.

One specimen labeled "Stadlau, 17, VI, 87, coll. Pok."

Dichaetoneura leucoptera Johnson.

Psyche XIV, p. 9, 1907.

Figs. 3, 21.

One specimen labeled "? Geneva, N. Y., P. J. Parrott, July 15, 12. From *Archips cerasivorana*."

Another specimen labeled with the same locality and date; also an extra label "fly from cage of *Archips cerasivorana*."

Another specimen labeled "Kentville, N. S." no date.

Two specimens labeled "Hopkinton, N. H., VII, 21, 24. Ex. *Archips cerasivorana* Fitch. Gip. Moth Lab. 10095 K 5."

Another specimen labeled "Windham, Conn., VII, 8, 21. Ex. *A. cerasivorana* Fitch. Gip. Moth Lab., 10095 G 3 a."

Another specimen labeled Bangor, Me., VII, 28, 24. Ex. *A. cerasivorana* Fitch. Gip. Moth Lab. 10095 K 1 C."

***Phytomyptera nigrina* Meigen.**

Europ. Zweifl. 4, p. 355, 1824.

Figs. 4, 22.

Two specimens; one labeled "Portici Napoli, Silvestri." No date. The other specimen without labels.

***Roeseliopsis floridensis*, new species.**

Figs. 17, 29.

Female.—Black species. Antennae, facial ridges, oral margin, femora, and tibiae yellow. Frontal bristles extending slightly below base of second antennal joint; two pairs of orbitals on the right side, one on the left. Sides of face at narrowest part almost one half as wide as facial depression, bare, with three or four hairs extending below frontals; facial ridge very broad, with bristles, diminishing in size, extending slightly above the middle and appearing to form two rows; vibrissae slightly above oral margin; palpi well developed and reddish yellow. Antennae extending slightly below middle of face; third joint nearly five times the length of the second; arista thickened to the middle and the penultimate joint about as long as its diameter. Thorax black with a gray pruinosity forming two narrow central stripes extending almost to the suture; humeri reddish; two presutural and three postsutural dorsocentrals; two presutural and three postsutural acrostichals; three sternopleurals; scutellum with four marginal pairs; one pair of widely separated discals and one large bristle on each side located below the marginals. Abdomen opaque gray pollinose tinged with yellow; segments one and two each with a marginal and a lateral pair; segment three with a marginal row, the middle pair slightly out of line with the others; fourth segment with a row, broken in the middle, located just below the middle of the segment. Middle tibia on the front side bearing four macrochaetae diminishing in size toward base of tibia; all tarsi with a brownish infuscation. Wings hyaline, with a decided depression in tip of apical cell; veins yellowish-brown; hind crossvein straight midway between the small crossvein and the tip of the fourth; two bristles at base of third vein; calypters yellowish white. Length, 8.5 mm.

Type locality.—Palm Beach, Florida, June 15, H. G. Dyar collector.

Type.—Female, Cat. No. _____, U. S. N. M.

Differs from *R. americana* Coquillett mainly in the antennae, dorsocentrals, acrostichals, and tip of wing.

Roeseliopsis americana Coquillett.

Proc. Biol. Soc. Wash. XXVIII, p. 23, 1915.

Figs. 6, 24.

One specimen labeled "Tifton, Ga. Oct. 1, 96. Type No. 3545 U. S. N. M. Collection Coquillett."

Hemithrixion oestriforme Brauer and Bergenstamm.

Zweifl. Kais. Mus. V, p. 357, 1891.

Figs. 5, 25.

Coquillettina plankii Walton.

One specimen labeled "Pasadena, New Jersey, 8, 13, 14. Bred specimen 8, 25, 14. Quaintance No. 11808. H. K. Plank collector. Type, Cat. No. 19599 U. S. N. M."

Another specimen labeled the same except "bred 8, 27, 14."

Another specimen labeled "Colorado." No date.

Racodineura antiqua Meigen.

Syst. Besch. IV, p. 412, 1824.

Figs. 7, 23.

One specimen labeled "Sardinia, A. H. Krausse." Another specimen labeled "Hunstauton, Norfolk, 24, IX, 00."

Plectops manea, new species.

Figs. 8, 20.

Male.—Front and ocellar triangle subshining, the former with a pale pruinosity along the edges; frontal bristles extending to apex of second antennal joint; two pairs of orbitals directed forward; ocellars divergent; sides of face very narrow, bare, with a whitish pruinosity; facial ridge not prominent and with small bristles on the basal fourth; vibrissae on a line with the oral margin. Antennae black, reaching to the oral margin; third joint about three times as long as broad; arista thickened on the basal half; penultimate joint a little longer than its diameter. Palpi well developed and black. Thorax with pale grayish pruinosity in front of the suture; two narrow stripes of equal width in the middle extending to the suture; another stripe, on each side of the central pair, is very narrow towards the front and quite broad behind; one large and one small presutural dorsocentral; three postsutural dorsocentrals; two sternopleurals and several hairs present; scutellum concolorous with the thorax, with one large basal macrochaeta and the large apical pair slightly divergent; numerous small bristly hairs on the disk; knobs of halteres pale yellowish brown. Abdomen shining black with a bronze reflection; segments one to four each with a marginal row of macrochaetae (the row on the third segment is slightly more submarginal); segments two to four each with a basal whitish pruinose band interrupted in the middle and widened on the outer ends. Legs black; middle tibia with one bristle on the outer side and one on the flexor side just above the

middle. Wings hyaline with the fourth longitudinal vein evanescent at its tip; third vein with four bristles at its base.

Length, 3.5 mm.

Female.—Very much like the male but with the following exceptions: Frontal bristles extending to base of second antennal joint. Abdomen nearly as broad as long; the macrochaetae arranged in submarginal rows, especially on segments three and four. Wing with the third vein having two to four bristles at its base (usually three bristles).

Length, 2.5–3.75 mm.

Described from six males and fourteen females.

Holotype male, Cabin John, Md., May 26, 1916, R. M. Fouts collector, Cat. No. U. S. N. M.

Allotype female, Dead Run, Fairfax County, Va., X, 28, 15, R. C. Shannon collector.

Paratypes.—One female, Livingston Heights, Va., 10, 27, 12; eight females, Dead Run, Va., X, 28, 15; two females, Dead Run, Va., XI, 11, 15, R. C. Shannon collector; one female, Caney Spring, Tenn., April 3, 1918, G. G. Ainslie collector; four males, Falls Church, Va., VIII, 27, Nathan Banks collector; one male, Glen Echo, Md., Aug. 2, 22, and one female, Glen Echo, Md., July 30, 22, J. R. Malloch collector.

H
A
APELOGLUTUS, new genus.

Front broad, slightly narrower towards the vertex; frontal stripe broad. Antennae reaching nearly to the oral margin; third joint slightly more than twice as long as wide, lower angle broadly rounded and the upper angle acute; third joint of arista thickened on the basal three fourths; penultimate joint half the length of the third; sides of face very narrow, bare; facial ridge bristly nearly half way. Anterior crossvein located slightly beyond the middle of the discal cell; hind crossvein retracted; the two crossveins separated by a distance slightly greater than the length of the hind one; third longitudinal vein ending near tip of wing; last section of fourth vein evanescent and about four times the length of the preceding section.

Genotype.—*Apheloglutus latifrons*, new species. Related to the genus *Plectops*.

Apheloglutus latifrons, new species.

Figs. 9, 26.

Female.—Small black species, robust, with thorax gray pruinose and abdomen shining.

Front gray pruinose, at the vertex twice as wide as either eye; the sides tapering slightly towards the vertex; frontal stripe broad, dull black; frontals reaching to base of second antennal joint; three pairs of orbitals, with two short bristly hairs below the lower orbital; ocellar pair small, divergent; inner verticals nearly twice as large as the outer pair; sides of face very narrow and bare.

Antennae black. Height of cheeks about two thirds that of the eye; palpi black. Three pairs of presutural acrostichals (postsutural injured by the pin); two presutural and three postsutural dorsocentrals; two large and two small sternopleurals; scutellum with numerous bristly hairs; one large macrochaeta near each basal angle and one large pair at its apex. Abdomen as broad as long; second, third, and fourth segments with a marginal row; third segment with a latero-discal pair; fourth segment with a discal row; segments two, three, and four with a very narrow basal pollinose whitish band interrupted in the middle. Legs black; middle tibia with a single macrochaeta on the outer front side and one on the flexor side just beyond the middle.

Wings hyaline; one small bristle at the base of the third vein. Length, 3.5 mm.

Described from one female.

Type locality.—Tennessee Pass, Colorado, VII, 7., 10240 feet, J. M. Aldrich collector.

Type.—Cat. No. U. S. N. M.

Schizotachina vitinervis Thompson.

Canad. Ent. xliii, p. 268, 1911.

Figs. 10, 10a, 27, 28.

Two specimens labeled, one, "No. 16a" and the other "No. 16aa," and both containing the following labels:

"Par. on *Tineid P. australis*. Iss. Feb. 20, 80."

Two specimens labeled, "Gipsy Moth Laboratory 2267 T, VI, 2, 10."

One specimen labeled "G. M. L., 2267 T, VI, 6, 10."

Schizotachina ruficornis, new species.

Figs. 11, 34.

Female.—Black with gray pruinosity. Antennae extending almost to oral margin, pale dull reddish yellow; third joint about four times as long as broad and about five times as long as the second; arista yellowish, with brown infuscation extending apically; second joint nearly two thirds the length of the third, the latter thickened nearly to the tip; frontals extending to the insertion of the arista; two pairs of proclinate orbitals and a few very minute frontal hairs; palpi yellow. Thorax pale gray pollinose with three postsutural and three presutural dorsocentrals; three pairs of presutural acrostichals (postsutural acrostichals injured by the pin). Abdomen shining black, nearly as broad as long; segments two and three with a broad pale pollinose basal band interrupted in the middle, wider at the interruption and at the lateral ends; fourth segment entirely thin pollinose. Legs brownish black, the tibiae slightly more yellowish; middle tibiae with one large bristle on the outer front side and one on the flexor side. Wings hyaline, veins yellow; fourth longitudinal vein evanescent; third vein with one large bristle at its base.

Length, 3 mm.

Described from two females.

Type locality.—Titusville, Florida (no date). G. G. Ainslie collector. Ainslie No. 1066.

Type.—Female, Cat. No. U. S. N. M.

Euryceromyia robertsoni Townsend.

Trans. Amer. Ent. Soc. XIX, p. 115, 1892.

Figs. 12, 30.

One specimen labeled "Anacostia, District of Columbia, 29, 9, 14. R. C. Shannon collector."

Actia eucosmae Bezzi.

Ann. & Mag. Nat. Hist. ser. 9, XVII, p. 239, 1926.

Figs. 13, 31.

One specimen labeled "Brisbane, Aust. T. H. Johnston."
Another specimen labeled "Richmond, N. S. W., April 29, 1928. T. D. A. Cockerell collector."

Actia lamia Meigen.

Europ. Zweifl. 7, p. 254, 1838.

Figs. 14, 32.

One specimen labeled "Sondrio, 9, V, 98."

Actiopsis autumnalis Townsend.

Ins. Ins. Menst. IV, p. 121, 1916.

Figs. 15, 33.

Two specimens labeled "Rosslyn, Va., IX, 17, 23, J. M. Aldrich collector."

Another specimen "Grove Hill, Md., 7, XI."

Another specimen Bethesda, Md., 23, 9, 14. J. C. Crawford collector, on *Aster ericoides*."

Another specimen "Pimmit Run, Va., 1, VIII, 08. F. Knab collector, on flowers of *Asclepias rubra*."

Another specimen labeled the same, but "on flowers of *Rhus glabra*."

Actiopsis rufescens, new species.

Figs. 16, 35.

Like *Actiopsis autumnalis* Townsend, but differing in the following characters:

Female.—Very much larger, the general color lighter; third antennal joint three times as long as wide, with the yellow at the base more definitely outlined; penultimate joint of the arista three times as long as broad; short bristly

hairs on sides of front not arranged in a definite row; palpi broader on apical portion. Thorax with the ground color red covered with a brassy pruinosity; scutellum a little more yellowish than the thorax, with the same pruinosity; one specimen with four long macrochaetae on each side of the scutellum instead of three. Abdomen with the ground color deep yellowish red with a very thin brassy pruinosity which is variable in appearance according to the angle of light; a faint grayish dorsal longitudinal stripe the length of the abdomen; one specimen with one weak discal macrochaeta on one side only of segments two and three. Legs yellowish red, tarsi darker and grayish.

Length 5.5-7 mm.

Described from two females.

Type.—Female, Cat. No. U. S. N. M.

Type locality.—South Dakota, no date. J. M. Aldrich collector.

APPENDIX.

Apostrophus anthophilus Loew.

Beschr. Eur. Dip't. ii, p. 310, 1871.

Figs. 36, 37.

This species was sent to Mr. J. R. Malloch for determination after my paper was completed. In order to make this paper complete with North American records I have included this European species in this appendix, as it is the first American record of this species.

It belongs in the group having the veins bare. It is easily separated from all the other species herein included in that it is shining black with a large luteous spot on each side of the second abdominal segment and extending backward on to the third segment and narrowly forward on the extreme lateral edges of segment one. Segment two has a narrow vertical black stripe in the middle of the dorsum.

One specimen labeled "Aklavik, N. W. T., June 27, 1931, O. Bryant, Lot 241"; the other, "Cooking Lake, Alberta, VII. 7, 32, O. Bryant collector."

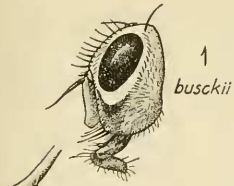
EXPLANATION OF FIGURES.

Drawings by C. T. Greene.

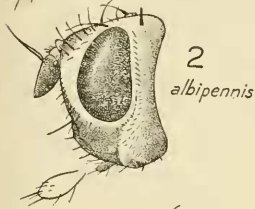
(*Except figs. 10, 15, 26, 27 & 32 by W. R. Walton.*)

- Fig. 1. *Bezzimyia busckii* Townsend.
 2. *Melizoneura albipennis* Desvoidy.
 3. *Dichaetoneura leucoptera* Johnson.
 4. *Phytomyptera nigrina* Meigen.
 5. *Hemithrixion oestriforme* Brauer & Bergenstamm.
 6. *Roeseliopsis americana* Coquillett.
 7. *Racodineura antiqua* Meigen.
 8. *Plectops manca* Greene.

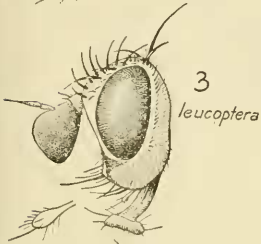
9. *Apheloglutus latifrons* Greene.
10. *Schizotachina vitinervis* Thompson, female.
- 10a. *Schizotachina vitinervis* Thompson, 3d antennal joint, male.
11. *Schizotachina ruficornis* Greene.
12. *Euryceromyia robertsoni* Townsend.
13. *Actia eucosmae* Bezzi.
14. *Actia lamia* Meigen.
15. *Actiopsis autumnalis* Townsend.
16. *Actiopsis rufescens* Greene.
17. *Roeseliopsis floridensis* Greene.
18. *Bezzimyia busckii* Townsend.
19. *Melizoneura albipennis* Robineau-Desvoidy.
20. *Plectops manca* Greene.
21. *Dichaetoneura leucoptera* Johnson.
22. *Phytomyptera nigrina* Meigen.
23. *Racodineura antiqua* Meigen.
24. *Roeseliopsis americana* Coquillett.
25. *Hemithrixion oestriforme* Brauer & Bergenstamm.
26. *Apheloglutus latifrons* Greene.
27. *Schizotachina vitinervis* Thompson, female.
28. *Schizotachina vitinervis* Thompson, male.
29. *Roeseliopsis floridensis* Greene.
30. *Euryceromyia robertsoni* Townsend.
31. *Actia eucosmae* Bezzi.
32. *Actia lamia* Meigen.
33. *Actiopsis autumnalis* Townsend.
34. *Schizotachina ruficornis* Greene.
35. *Actiopsis rufescens* Greene.
36. *Apostrophus anthophilus* Loew.
37. *Apostrophus anthophilus* Loew.



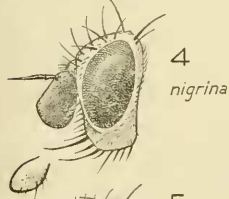
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busckii



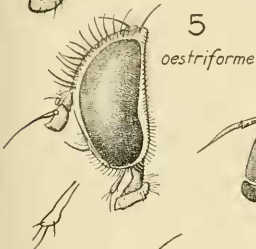
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albipennis



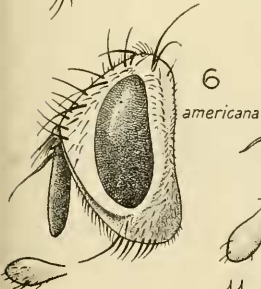
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leucoptera



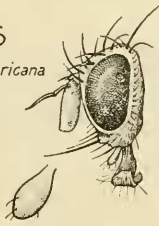
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nigrina



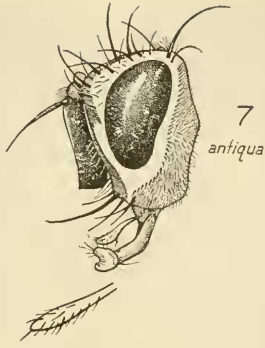
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oestriforme



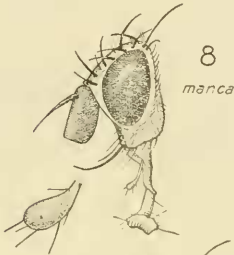
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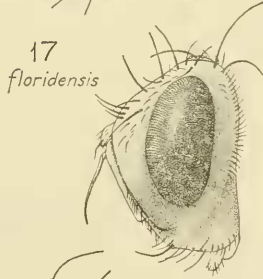
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ruficornis



7
antiqua



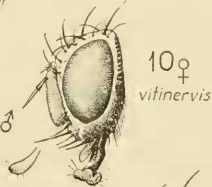
8
manca



17
floridensis



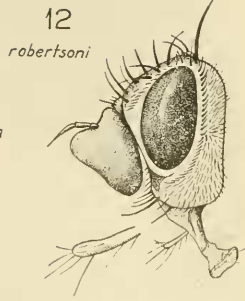
10a ♂



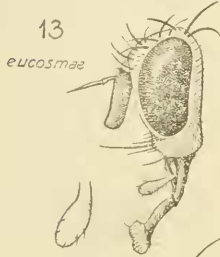
10 ♀
vitinervis



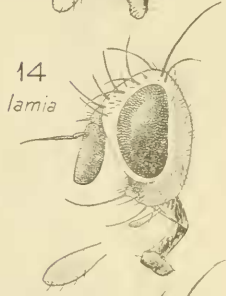
9
latifrons



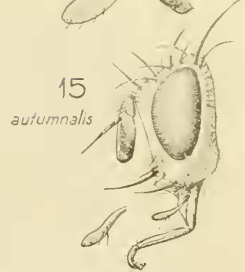
12
robertsoni



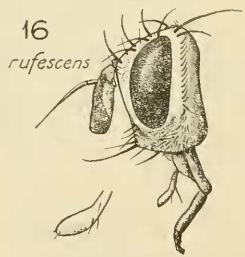
13
eucosmae



14
lamia



15
autumnalis



16
rufescens



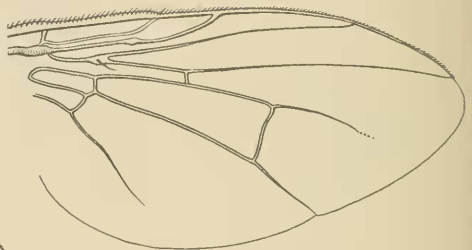
18 *busckii*



23 *antiqua*



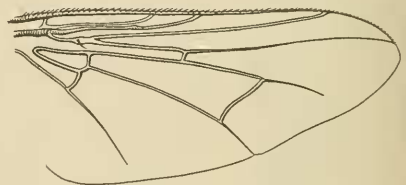
19 *albipennis*



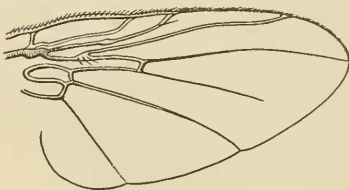
24 *americana*



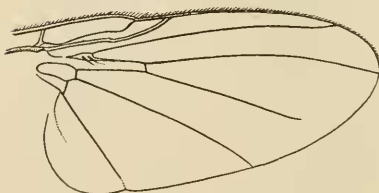
20 *manca*



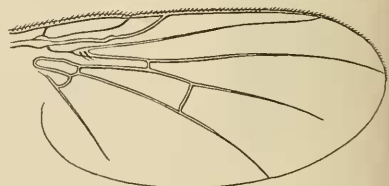
25 *oestriforme*



21 *leucoptera*



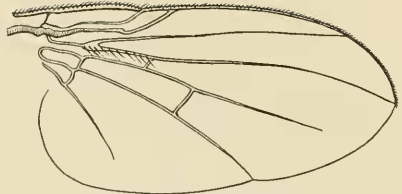
22 *nigrina*



26 *latifrons*



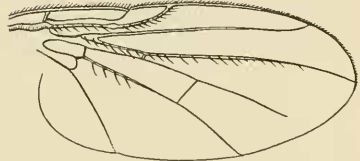
27 *vitinervis* ♀



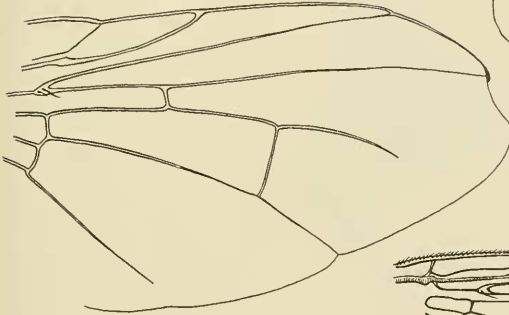
31 *eucosmae*



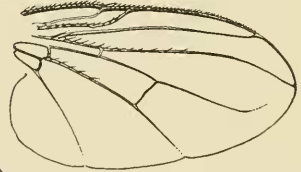
28 *vitinervis* ♂



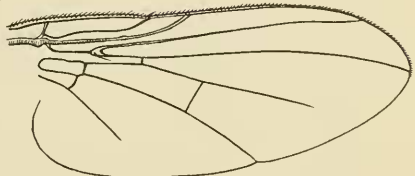
32 *lamia*



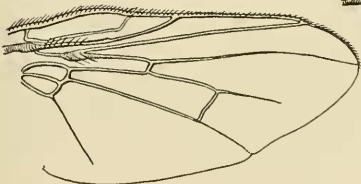
29 *flacidensis*



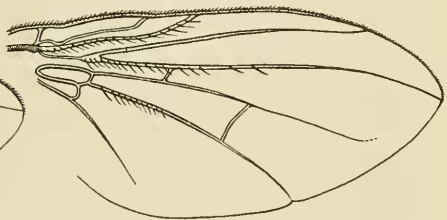
33 *autumnalis*



34 *ruficornis*



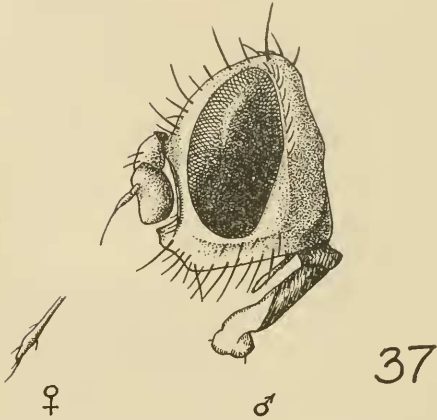
30 *robertsoni*



35 *rufescens*



anthophilus 36



Apostrophus anthophilus Loew. Wing 36, head and palpus 37.